

**SECRETARY'S ENVIRONMENTAL ASSESSMENT REPORT
FOR A COASTAL ZONE ACT PERMIT APPLICATION**

Re: Praxair Distribution, Inc.

January 2016

Introduction

As required by the "Regulations Governing Delaware's Coastal Zone" (Section 8.3.4) dated May 11, 1999, and amended October 1, 2001, the Secretary is required to make an environmental assessment of the impact(s) of the project on the Coastal Zone of Delaware. This is done by evaluating the project's likely impact on the statutory and regulatory criteria and making a preliminary determination of the sufficiency of the Offset Proposal. The following is such an environmental assessment of the proposed project described in an application for a Coastal Zone Act (CZA) Permit, received from Praxair Distribution, Inc. ("PDI").

The fact that DNREC considers an application to be preliminarily, administratively complete does not constitute the Department's position as to whether the application should be approved or denied. That decision will not be made until after the public hearing. The purpose of the Secretary's written assessment is to assist the applicant and the public to focus on issues presented in the application. It constitutes an administrative determination that the application is sufficient to proceed to a public hearing. In addition, should the Department eventually issue the CZA Permit, it does not automatically guarantee the applicant will receive other required permits.

The Proposed Project

PDI, a wholly-owned subsidiary of Praxair, Inc. ("Praxair"), is seeking a permit to construct and operate a dry ice unit within the footprint of the permitted Praxair carbon dioxide purification and liquefaction unit ("CO₂ unit") at the Delaware City Refinery, 4550 Wrangle Hill Road, Delaware City. Liquid carbon dioxide will be sent from the CO₂ Unit to a horizontal above grade tank for use in the production of dry ice (approximately 1.3 pounds of liquid CO₂ needed to produce 1.0 pound of dry ice). The liquid CO₂ is converted to dry ice snow through a simple pressure reduction. The dry ice snow is then pressed into 50-pound blocks within the block press or used to make nuggets and pellets with extruders. Production of dry ice will be capped at a maximum of 156 tons per day.

Environmental Assessment

The Dry Ice Unit will not have any regulated air discharges or other environmental impacts. Water for the facility's personnel sanitation facilities and power washing of the dry ice storage boxes, amounting to 315 gallons per day, will be purchased from United Water Delaware whose water supply includes intakes along Red Clay Creek and White Clay Creek, with an alternate supply from Christina River. The average flow of 315 gallons per day wastewater generated from the Dry Ice Unit will be sent to the Refinery's existing wastewater treatment system. The power consumption of the Dry Ice Unit will average approximately 1,625 kWh, which will be supplied by Delmarva Power's distribution system. In terms of solid waste, activated carbon filters (used to remove impurities from the CO₂ vapor; estimated lifetime of approximately 2 years), will be transported to a permitted landfill. There will be no change in glare, heat, noise or vibration, no impact from radiation, electromagnetic interference and noxious odors.

The Dry Ice Unit, an ancillary of the CO₂ Unit, will be constructed within the footprint of the Refinery, an existing grandfathered non-conforming use, as shown in the application.

There will be no new supporting facilities and services required to support the proposed project.

Effects on neighboring uses will be minimal.

The proposed facility and operation is consistent with the New Castle County Comprehensive Development Plan.

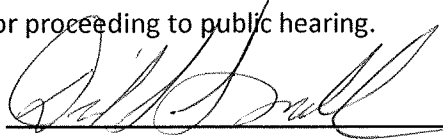
Offset Proposal

As no negative environmental impacts are expected from this project, no offset will be required.

Sufficiency Statement and Conclusion

This application for a CZA Permit, including supplemental information, has been reviewed by the Department to determine its completeness. After a thorough review of the company's application and file, the Department considers this application to be administratively complete and sufficient for proceeding to public hearing.

Approved: _____


David S. Small
Secretary

Date:

2/5/16